

## REMARKS

By virtue of this amendment claim 1-15, 22-25, 27-31, 33, and 34 are pending in this application. No new matter has been added by this amendment and response. Claims 1, 13, 22, 23, 25, 28 and 31 have been amended. Claims 16-21, 26, and 32 have been canceled without disclaimer or prejudice.

In an August 31, 2005 Office Action, the period for which to respond extends until November 30, 2005, the Examiner rejected the claims of the present application. In particular, the Examiner rejected claims 1-4, 6-15, and 22-34 under 35 U.S.C. § 103(a) as being unpatentable and obvious over United States Patent 6,500,079 ("Tucker") in view of United States Patent 4,739,994 ("Lewis"). The Examiner rejected claims 5 under 35 U.S.C. § 103(a) as being unpatentable over Tucker in view of Lewis in further view of the Examiner's official notice that Carbon Fibers are well know in the art. The Examiner rejected claims 1-4, 7-10, 12-15, and 22-34 under 35 U.S.C. § 103(a) as being unpatentable over United States Patent 4,958,395 ("Busskohl") in view of an article from Performix relating to Plasti Dip ("Plastidip") in further view of Official Notice regarding the use of composite materials. The applicants respectfully traverse the rejections.

### Regarding the rejection under 35 U.S.C. § 103(a) to Tucker and Lewis

The Examiner rejected claims 1-4, 6-15, and 22-34 under 35 U.S.C. § 103(a) as being unpatentable over Tucker in view of Lewis. The applicants respectfully traverse the rejection.

Claim 1 has been amended and recites a combination of elements including, for example, "an elongated body portion comprising a synthetic semi-flexible material, the elongated body having a first end and a second end; a tapered portion disposed on the elongated body portion, the tapered portion sufficiently removed from a head receiving portion to allow hand placement without contacting the head receiving portion," which is not disclosed by the references.

Tucker discloses a basic lacrosse stick having a shaft and a detachable head. As the Examiner seems to admit, Tucker does not disclose a tapered

portion on the shaft. Rather, Tucker discloses a lacrosse stick having separate overlays 110 and 112 (or more) strategically disposed on the shaft. The shaft 106, however, is of a constant diameter.

The Examiner relies on Lewis for the disclosure of a inwardly tapered portion. Lewis discloses a metallic lacrosse shaft. A lacrosse head is attachable to one end of the shaft. To accommodate the connecting the detachable head, the very end of the shaft in Lewis is tapered. Typical of most metallic shafts, Lewis discloses cold drawn metal formed into a tubular shape. The taper disclosed by Lewis must be at the end of the shaft and cannot be internal to the shaft because of the manufacturing technique. Moreover, the taper disclosed in Lewis is specifically to allow the head to be fitted onto the shaft. Thus, the head occupies the tapered portion.

Conversely, amended claim 1 recites “an elongated body portion comprising a synthetic semi-flexible material, the elongated body having a first end and a second end; a tapered portion disposed on the elongated body portion, the tapered portion sufficiently removed from a head receiving portion to allow hand placement without contacting the head receiving portion.” The office is requested to take official notice of the official national lacrosse league rules which require: “A player in possession of the ball who holds his stick against any part of his body is withholding the ball from play. The glove hand, particularly the thumb, cannot grasp any portion of the head of the stick.” (National Lacrosse League Rules at Rule 52, Technical Penalties, paragraph e(3)). Thus, any National Lacrosse League player and shaft designer would recognize the importance of removing the taper from the end of the shaft, which is not disclosed by Lewis. Moreover, using current construction techniques, Lewis cannot be modified to include a taper anywhere by the end of the shaft. Finally, the purpose of the taper in Lewis is to accommodate attachment of the head and not to provide flex, hand placement positions, or the like in the shaft.

For at least these reasons, it is respectfully submitted that claim 1 is not disclosed by either Tucker or Lewis either alone or in any reasonable combination thereof. The applicants respectfully request the withdrawal of the rejection of

claim 1 under 35 U.S.C. § 103(a) as being unpatentable over Tucker and Lewis either alone or in any reasonable combination thereof.

Amended claims 13, 22, 23, and 31 contain recitations similar to amended claim 1 and, at least by virtue of the similarities, are not disclosed by either Tucker or Lewis either alone or in any reasonable combination thereof. The applicants respectfully request the withdrawal of the rejection of claims 13, 22, 23, and 31 under 35 U.S.C. § 103(a) as being unpatentable over Tucker in view of Lewis. Claims 2-4, 6-12, 14, 15, 24-30, and 32-34 depend directly or indirectly from one of claims 1, 13, 23, and 31 and, at least by virtue of the dependency, are not disclosed by Tucker or Lewis either alone or in any reasonable combination thereof. Thus, the applicants respectfully request the Examiner withdraw the pending rejections of claims 2-4, 6-15, and 22-34 as being unpatentable in view of Tucker and Lewis.

Regarding the rejection of claim 2, the Examiner stated: “The specification provides no detail as to what constitutes and “outwardly tapered head”, therefore the Lewis taper is considered outwardly tapered.” The applicants respectfully direct the Examiner’s attention to Fig. 2B and the associated text. With particular reference to paragraph 30, lines 2-6, the written description states: “According to Fig. 2B, the elongated body 215 is thinned down to women’s size, and the first and second head receiving portions 205, 230 are *flared or reverse tapered as shown*. The flared first and second head receiver portions 205, 230 are configured to allow a detachable lacrosse head of standard size to be mounted on the shaft 200 without any additional attachments. Thus, it is respectfully suggested that the specification does provide detail regarding what outwardly tapered constitutes. Furthermore, Lewis as the Examiner alleged in the rejection of claim 1 shows an inwardly tapered head receiving section, the exact opposite of an outwardly tapered section. Thus, for at least this additional reason, claim 2 is not disclosed by Tucker and Lewis either alone or in any reasonable combination thereof.

Claim 30 contains recitations similar to claim 2 and, at least by virtue of the similarity, are not disclosed by Tucker and Lewis for this additional reason as

well. Claims 3 and 11 depend directly or indirectly for claim 2 and, at least by virtue of the dependency, are not disclosed by Tucker and Lewis for this additional reason. Moreover, claims 3, 11, and 30 relate to at least 1 inwardly tapered section and 2 outwardly tapered end sections. Neither reference discloses outwardly tapered ends. Nor does either reference disclose tapering both ends. For at least this additional reasons, claims 3, 11, and 30 are not disclosed by Tucker and Lewis.

Regarding claim 8, it recites “the tapered portion is disposed in a position on the elongated body that is consistent with a standard hand position of a player for the sport within which the sports shaft is designed to be used,” which is not disclosed by the reference. As mentioned above, the Examiner is requested to take official notice of the rules of lacrosse. Specifically rule 52, paragraph e(3) which states: “A player in possession of the ball who holds his stick against any part of his body is withholding the ball from play. The glove hand, particularly the thumb, cannot grasp any portion of the head of the stick.” Clearly, Lewis discloses a tapered section to facilitate attachment of the head. As one of ordinary skill in the art would recognize, if a player attempted to grip the shaft of Lewis at the taper, it would be in clear violation of the rules of lacrosse. Thus, Lewis cannot have the taper at a standard hand position of a player. Moreover, Lewis is a cold drawn shaft and cannot be modified to provide the taper elsewhere. Finally, as the taper in Lewis is specifically to facilitate attachment of the head, no motivation exists to place the taper internal to the ends even if it was possible. Thus, for at least this additional reason, claim 8 is not disclosed by Tucker or Lewis either alone or in any reasonable combination thereof.

Regarding the rejection of claim 9, the Examiner refers to Lewis at column 8, lines 31-45, for disclosure of a rubber coating. The rejection is not understood as Lewis does not have a column 8. Clarification is requested. Moreover, the only rubber disclosure in Lewis is a rubber end cap fitted over the butt end of the shaft. Lewis has no mention of a gripable coating or rubberize paint. For at least this additional reason, claim 9 is not disclosed by Tucker or Lewis in any reasonable combination.

Regarding the rejection under 35 U.S.C. § 103(a) to Busskohl in view of Plastidip and Office Notice.

The Examiner rejected claims 1-4, 7,-10, 12-15, and 22-34 under 35 U.S.C. § 103(a) as being unpatentable over Busskohl in view of Plastidip and official notice. The applicants respectfully traverse the rejection.

As an initial matter, it is respectfully submitted that Busskohl is non-analogous art. In particular, the claims of the present application all relate to “sport shafts.” Busskohl conversely relates to an “Outdoor Cutting Kit Apparatus.” It is respectfully submitted that no-one of ordinary skill in the art of sport shafts would refer to sawing technology to develop a sports shaft. The non-analogous nature of Busskohl is demonstrable by the US patent office classifications as well. The present invention is classified as 473/505 – Player Held Device for Both Projecting and Catching Aerial Projectile; Part Thereof or Accessory – while Busskohl is classified as 7/145 – Axe, Hatchet, or adz head: “Tools wherein an impacting head is mounted on the end of a handle member, one end of the head having a *cutting edge thereof* and such head being of the general structure of a hatchet, axe, or adz. Clearly, the present invention is not a hatchet, adz, or adz head and does not have a *cutting edge*. No would anyone consider an outdoor cutting tool analogous to a lacrosse shaft. Thus, for at least this reason, the claims are not disclosed by a combination of Busskohl, Plastidip, or Official Notice.

Even assuming one of ordinary skill in the art would refer to Busskohl, it is unclear how Busskohl would relate to a sports shaft and a lacrosse shaft in particular. In particular, Busskohl only shows a taper on the handles at the end to facilitate a connection between the handle and the head. To the extent the reference is analogous, this is similar to the connections in Lewis. Claim 1, for example, recites a combination of elements including: “an elongated body portion comprising a synthetic semi-flexible material, the elongated body having a first end and a second end; a tapered portion disposed on the elongated body portion, the tapered portion sufficiently removed from a head receiving portion to allow hand placement without contacting the head receiving portion,” which is

not disclosed by Busskohl. Rather, Busskohl at most discloses a tapered portion of the head handle connection, which is not “sufficiently removed from a head receiving portion to allow hand placement without contacting the head receiving portion,” as required by the official rules of lacrosse, referenced above. Thus, for at least this additional reason, claim 1 is not disclosed by Busskohl, Plastidip, and the Official Notice, either alone or in any reasonable combination thereof.

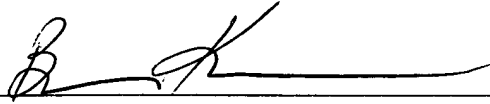
In view of the foregoing, the applicants respectfully request the Examiner reconsider and withdraw the pending rejection of claim 1 in view of Plastidip and the Official Notice. Amended claims 13, 22, 23, and 31 contain recitations similar to amended claim 1 and, at least by virtue of the similarities, are not disclosed by Busskohl, Plastidip, and the Official Notice either alone or in any reasonable combination thereof. The applicants respectfully request the withdrawal of the rejection of claims 13, 22, 23, and 31 under 35 U.S.C. § 103(a) as being unpatentable over Busskohl, Plastidip, and the Official Notice. Claims 2-4, 7-10, 12, 14, 15, and 24-34 depend directly or indirectly from one of claims 1, 13, 23, and 31 and, at least by virtue of the dependency, are not disclosed by Busskohl, Plastidip, and the Official Notice either alone or in any reasonable combination thereof. Thus, the applicants respectfully request the Examiner withdraw the pending rejections of claims 2-4, 7-10, 12, 14, 15, and 24-34 as being unpatentable in view of Busskohl, Plastidip, and the Official Notice.

Reconsideration and allowance of claims 1-15, 22-25, 27-31, 33, and 34 of this application is respectfully requested.

If an extension of time under 35 C.F.R. § 1.136 is required to obtain entry of this Amendment, such an extension is requested. If there are fees due under 37 U.S.C. §§ 1.16 or 1.17 which are not otherwise accounted for, please charge our Deposit Account No. 08-2623.

Respectfully submitted,

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